T/VIII/W-1
16 October 1964

UNITED STATES INTELLIGENCE BOARD

COMMITTEE ON DOCUMENTATION

Task Team VIII - Photo Chip

TERMS OF REFERENCE

Definition of Terms

1. Photographic (Pictorial) information is considered, for this Task Team's work, to include all images of all kinds of information on all kinds of materials.

2. Photo Chip, for the general purposes of this Task Team's investigations is considered to be any photographic image of any generation of any material that is not a part of a film or print strip.

NOTE - Definitions and Terms of Reference herein used are cast in broad terms in order to assure the most thorough and comprehensive examination of the various factors bearing on the Problem of Photo Chip standardization.

Objectives of Task Team

1. To assess the present and potential value of Photo Chip standardization to the Intelligence Community in providing support to national defense and to US foreign policy;

2. To formulate ways and means for the Intelligence Community to improve the exploitation, exchange and use of imagery data, both in single-source and all-source production, with particular reference to reconnaissance materials; and,

3. To appraise the impact of the foregoing on:

a. the quality, timeliness and relevance of both single-source and all-source intelligence production in the community;

b. the effectiveness and efficiency of the community's information processing system; and,

c. the procedures and organization of those presently concerned with the collection, production, use and control of photographic materials (multi-sensor imagery), especially those derived from aerial reconnaissance.

Terms of Reference*

I. General Identification of the existing Photographic Information (multi-sensor imagery) collection, processing and using systems at the National, Departmental and Operational levels.

Questions - What are the names, ages, and general functions of the various systems? Which ones are located within the Intelligence Community? Outside the Community? What are the interface relationships between the group within the Community and the group outside? What are the interface relationships among those systems within the Community? Among those outside? What are the major uses made of photographic information -- by the collector/processores? By the single source producers? By multiple-source producers? By the users of various intelligence end products? By others?

II. Identification and description of existing Photo Chip systems at the National, Departmental and Operational level.

Questions - What is the name, age and general function of each system? At what level or levels does it function? And, what are its production and functional responsibilities? How has the system worked over the past few years, and what are its prospects over the immediate and medium-term

*These Terms are designed

future? What are its present interface relationships with other Photo Chip systems and with other intelligence information systems, and what are these likely to be in the future? What are the major uses made of Photo Chip systems -- by the processor/producers? By the single-source producers? Multiple-source producers? By users of all various intelligence end products?

III. Present and Prospective Intelligence Requirements for photographic information and Photo Chips at the National, Departmental and Operational level.

Questions - What are the needs of various users, both present and potential, for photographic information (imagery) in general? What are the present and potential requirements for photographic information in Photo Chip form? What are the varying requirements for technical characteristics of any Photo Chip systems, such as, minimum and maximums for systems scales, installation area size, quality and the like? What are the critical differences (to intelligence user) in these areas, and the reasons there for? What are the advantages, disadvantages of the Photo Chip form? Photo Chip standardization?

IV. Exploitation Policy and Procedures for Photographic Information (imagery).

Questions - What has been the general trend in the use of photographic imagery data with emphasis on reconnaissance photography? What has been the general policy on the collection, control, dissemination and use of photographic information, especially in regard to reconnaissance photography? How has this affected its usefulness? What are the trends in these regards, and how might the possible broader use of reconnaissance materials bear on both technical characteristics of Photo Chip standardization and future policies regarding dissemination and use? What are the problems and concerns of general all-source analytic offices as distinct from processor/producers and special (single) source or single purpose producers? What are the present means for making strategic photographic (imagery) information available to general analysts and users? How adequate are these in terms of both present and prospective user needs? What means would be most effective in bringing these latter considerations to bear on Task Team deliberations?

V. Possible benefits from Photo Chip Standardization.

Questions - (content value and use). What changes might occur in quality of photographic (imagery data) in Photo Chip form? How might the dissemination, exchange and timeliness of photographic (imagery data) be affected by Photo Chip standardization? How might Photo Chip standardization affect the extent of use for intelligence purposes? For other purposes? In what areas are we most likely to realize advantages from the more extensive use of Photo Chipped information and from the prospective more extensive use of chipped (imagery) data as a part of the Community all-source production effort?

Questions - (efficiency-economy). To what extent might we expect a Photo Chip standardization to lead to improvement in the overall effectiveness and efficiency of the Community intelligence effort? Where might these improvements occur? For what reasons? In what forms might these become evident? Money savings? Manpower savings?

Questions - (countervailing impacts). What might be countervailing effects of Photo Chip standardization? Added cost for chip production, dissemination, use? Added cost from broader use of chipped photographic information? Or more intensive use? What other difficulties might arise in the development of Photo Chip standardization? How would the foregoing appear over the short-term? The long-term?

VI. Constraining Factors.

Questions - (Technology). What constraints might be encountered in present technology affecting collection, processing distribution and use of photographic information carried in Photo Chip form? Where are the most critical constraining points to be found? What is the impact of each constraining point on the coverage, quality, timeliness and general availability of photographic information to the Intelligence Community? How do the foregoing bear on Photo Chip standardization? Size? Form? Handling? Hardware? What are the trends in technology affecting the foregoing generally? What would be the impact of advancing technology on each of the constraint points? When might these occur?

Questions - (Policy, security, customs, organiztion structure, exploitation capability). In what ways might any of these affect the collection, processing, distribution and use or photographic (imagery data) information in Photo Chip form? For example, how might the present organizational structure of the Community affect the cost and utility of Photo Chip standardization?

Questions - (Chemistry). What are the constraints of present chemistry on the quality of photographic information, especially reconnaissance photography? How does this bear on the size and form of a Photo Chip? On the content value? On 2nd and 3rd etc., quality and generation file utility? What are the trends in chemistry related to photographic storage of information? What might be the timing and nature of future improvements? Memo? Sterio? Color? Black-White?